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(54) Support for back of head

(57) An occipital support for cooperating with a support for inducing an active spine correction as a patient tries to evade an admonition support incorporates a neck roll 1, 2 on a support frame 3, 4 appropriately fastened to the patient's body. The neck roll provides firm support for the patient's head as it is tilted backward in response to the admonition support.

Fig. 1

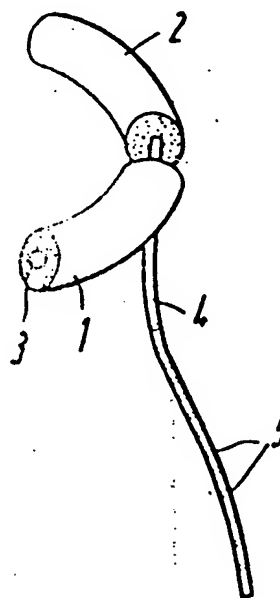


Fig. 1

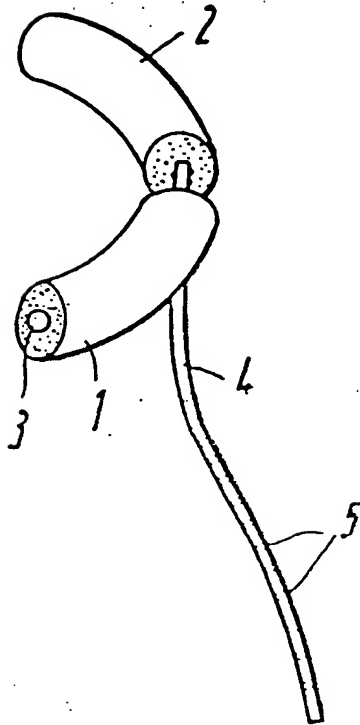


Fig. 2

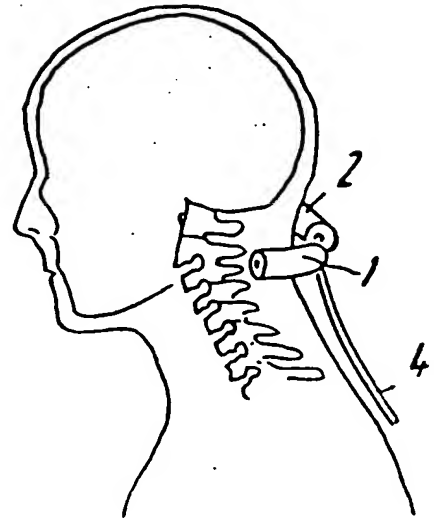


Fig. 4

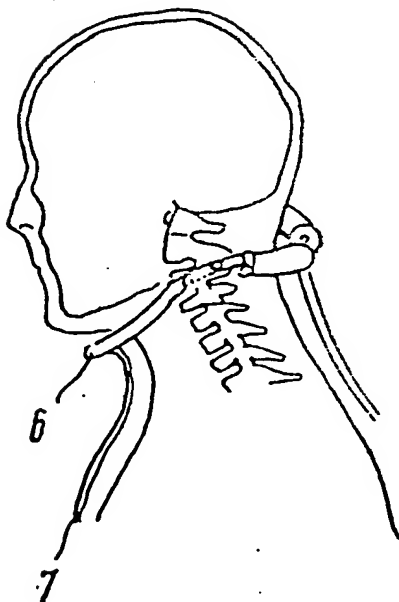
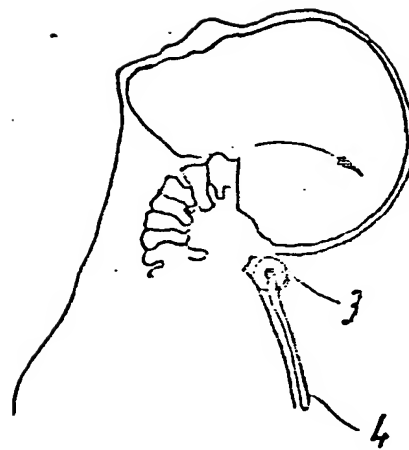


Fig. 3



SPECIFICATION

Support for back of head

5 The invention relates to occipital supports for the back of the heads of human patients as counter support for an admonition support to promote an active extension of the patient's spine.

The load of the human head is commonly supported by means of a head support to relieve or correct the spine which operates passively. If the whole spine is to be relieved of the weight of the head, the load absorbed by the head support is transferred to the crest of the pelvis. For a relief of the cervical or neck vertebrae alone, the load is transferred to the shoulder-girdle. In either case it is essential that the load be transferred to the relevant body surfaces without causing pain. Whilst the areas available within the pelvic and shoulder-girdle range are relatively large, so that the specific pressure is low, this is not the case in the region of the head.

The use of an exclusively passive head support entails a permanent pressure which acts on the support surfaces of the lower jaw which may result in deformation of the lower jaw and the teeth. This is why a so-called active extension of the patient's spine has been developed. For this an admonition support is used which does not exert a passive pressure but results in a more or less unpleasant pressure which the patient can and is intended to evade by the use of certain muscles. The evasive action effects the correction or the extension of the patient's spine.

The admonition support requires, as a counter-part, an occipital support. The occipital support sections employed in the past for active extension have had the shape of shells or semi-shells and resemble the head supports for passive extension. The extension achieved has however been small.

40 The invention sets out to improve the aforementioned occipital support for active spine extension in such a way as to improve its effect.

In the invention extension or correction is facilitated in a surprisingly easy way by designing the occipital support sections as a neck roll i.e. an elongate pad having a relatively small width compared with the known shell-shaped supports. The shape of the neck roll should preferably be curved and approximate a circular arc and, for best results, a curved support member or bracket should be inserted through centres of sections of the neck roll.

Because the back of the head is supported from underneath by a neck roll, the patient can lift his chin virtually without restriction. The back of the head no longer slides out of the support but tilts backward over the neck roll. The roll can effectively act as a pivot support for the tilting movement. An increased extension effect is achieved. As the patient raises his chin in response to the admonition support and the head tilts backward, the patient has firm support for the tilting movement and does not slide up or down with respect to the support as may occur with shell-

shaped supports which offer no grip.

The drawings show:

65 Figure 1 is an isometric representation of an occipital support of one design according to the invention;

70 Figure 2 is a scaled-down illustration of the occipital support according to Figure 1 fixed in its working position;

Figure 3 is a cross section through the occipital support according to Figure 1; and

75 Figure 4 is another design of an occipital support according to the invention fitted in its working position.

In accordance with Figure 1 an occipital support shown consists of a two-part neck roll 1, 2 comprising one left-hand 1 and one right-hand occipital support section 2. The neck roll 1, 2 is made of a synthetic material and, inserted through its centre, is a support bracket 3 in the shape of a circular arc of a member which is attached to a downward pointing support bar 4 between the two neck roll sections 1, 2. The shape of the bar 4 is adapted to the patient's neck, or shoulder contours and it has numerous bores 5 to facilitate a heightwise adjustment of the support.

85 Figure 3 shows that, when the chin is lifted, the back of the head can roll down over the neck roll 1, 2, so that the extension effect of the support is maintained.

90 Figure 4 shows a design variation in which the occipital support is integrated in a neck ring 6 to give a closed ring which is supported on the chest side by a further support 7.

95 The neck roll 1, 2 may turn in use on the frame to reduce friction. The roll 1, 2 may however be non-turnable on the frame as the head does not slide to a great extent over the neck roll.

CLAIMS

1. A support for the back of a patient's head including a neck roll attached to a support frame.
2. A support according to claim 1 in which the neck roll is arc-shaped.
- 105 3. A support according to claim 1 or claim 2 in which the support frame includes a bracket extending centrally in a longitudinal direction through the neck roll.
4. A support according to any of the preceding claims in which the neck roll comprises a right and left hand support section.
- 110 5. A support according to claim 4 in which the support frame includes an upright support bar extending downwardly from between the sections.
- 115 6. A support ring according to any of the preceding claims which is part of a neck ring surrounding the neck.
7. A support according to any of the preceding claims which is combined with an admonition support for active spine extension.
- 120 8. A support substantially as described with reference to and as shown in Figures 1 to 3.
9. A support substantially as described with reference to and as shown in Figure 4.

New claims or amendments to claims filed on 8 Jan 1980. -

Superseded claims--all claims.

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New or amended claims:--

1. A support for the back of a patient's head for promoting an active extension of a patient's spine including a neck roll in the form of a generally cylindrical pad having a longitudinal axis and a support frame attached axially to the neck roll.
2. A support according to claim 1 in which the neck roll is an arced cylindrical pad.
3. A support according to claim 1 or claim 2 in which the support frame includes a bracket extending axially through the neck roll.
4. A support according to any of the preceding claims in which the neck roll comprises right and left generally cylindrical pads.
5. A support according to claim 4 in which the support frame includes an upright supporting bar extending downwardly from between the pads.
6. A support according to any of the preceding claims which is part of a neck ring surrounding the neck.
7. A support according to any of the preceding claims which is combined with an admonition support for active spine extension.
8. A support substantially as described with reference to and as shown in Figures 1 to 3.
9. A support substantially as described with reference to and as shown in Figure 4.

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